AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A bitstream transcoding method comprising the steps of:

analyzing ~~a data structure of~~ a bitstream ~~to be input to thereby detect whether a relevant~~ to identify a bit string corresponding to a coded DCT block having ~~contains~~ a DCT coefficient ~~in a macro block~~;

~~leaving as is only one~~ identifying, in the bit string, a sub bit string corresponding to first "non-zero" coefficient ~~encountered first in scanning~~ in said DCT block in a scan direction; ~~detected to contain said DCT coefficient and~~

transcoding the bit string based on the sub bit string to produce a transcoded bit string with fewer bits than the bit string~~all the other DCT coefficients to "0"~~; and

outputting said bitstream by substituting the bit string in the bitstream using the transcoded bit string ~~having a code quantity thereof reduced by said transcoding step~~.

2. (Currently Amended) A bitstream transcoding method comprising the steps of:

analyzing ~~a data structure of~~ a bitstream ~~to be input to thereby detect whether a relevant~~ to identify a bit string corresponding to a coded DCT block having ~~contains~~ a DCT coefficient ~~in an inter-macro-block~~ and in an inter predictive coding mode ~~accompanied by predictive coding~~;

identifying, in the bit string, a sub bit string corresponding to a DC coefficient in the DCT block;

transcodin g the bit string based on the sub bit string to produce a transcoded bit string with fewer bits than the bit string; and

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~~leaving as is only a DC coefficient in said DCT block detected to contain said DCT~~ ~~coefficient in said inter-macro block and transcoding all the other AC coefficients to "0"; and~~

outputting said bitstream <u>by substituting the bit string in the bitstream using the</u> <u>transcoded bit string</u> ~~having a code quantity thereof reduced by said transcoding step~~.

3. (Currently Amended) The bitstream transcoding method according to claim 2, wherein if <u>the sub bit string</u> ~~said DC coefficient~~ <u>represents</u> ~~is~~ "0", a <u>second sub bit string</u> <u>corresponding to a</u> predetermined AC coefficient <u>in the DCT block</u> is <u>used in place of the sub bit</u> <u>string</u> ~~assigned as said coefficient to be left as is~~.

4. (Currently Amended) A bitstream transcoding method comprising the steps of:

analyzing ~~a data structure of~~ a bitstream ~~to be input to thereby detect whether a relevant~~ <u>to identify a bit string corresponding to a coded</u> DCT block <u>having</u> ~~contains~~ a DCT coefficient ~~in~~ ~~an intra-macro~~ <u>and in an intra non-predictive coding mode</u> ~~block not accompanied by predictive~~ ~~coding~~;

<u>identifying, in the bit string, a sub bit string corresponding to</u> ~~leaving as is only~~ a DC coefficient in said DCT block ~~detected to contain said DCT coefficient in said intra-macro block~~ ~~and~~<u>;</u>

transcoding ~~all the other AC coefficients to "0"~~ <u>the bit string based on the sub bit string to</u> <u>produce a transcoded bit string with fewer bits than the bit string</u>; and

outputting said bitstream <u>by substituting the bit string in the bitstream using the</u> <u>transcoded bit string</u> ~~having a code quality thereof reduced by said transcoding step~~.

5. (Currently Amended) A bitstream transcoding method comprising the steps of:

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analyzing ~~a data structure of~~ a bitstream <u>to identify a bit string corresponding to a coded</u> ~~to be input to thereby detect whether a relevant~~ DCT block <u>having</u> ~~contains~~ a DCT coefficient ~~in a macro block~~;

identifying, in the bit string, a sub bit string corresponding to first N coefficients in the DCT block in a scan direction ~~leaving as are only the first through N'th coefficients (N: natural number) in said DCT block detected to contain said DCT coefficient and~~;

transcoding <u>the bit string based on the sub bit string to produce a transcoded bit string with fewer bits than the bit string</u> ~~all the other DCT coefficients to "0"~~; and

outputting said bitstream <u>by substituting the bit string in the bitstream using the transcoded bit string</u> ~~having a code quantity thereof reduced by said transcoding step~~.

6. (Currently Amended) The bitstream transcoding method according to claim 5, wherein when said first ~~through N'th~~ <u>N</u> coefficients ~~encountered in said scanning~~ are all "0", a <u>second sub bit string corresponding to a</u> predetermined AC coefficient <u>in the coded DCT block is used in place of the sub bit string</u> ~~is assigned as said coefficient to be left as is~~.

7. (Currently Amended) A bitstream transcoding method comprising the steps of:

analyzing ~~a data structure of~~ a bitstream <u>to identify a first bit string corresponding to a coded macro block type for a macro block, indicating having at least one block with a DCT coefficient and motion compensation applicable</u> ~~to be input to thereby detect whether a macro block type indicates "performing of motion compensation and containing of a block having a DCT coefficient"~~;

identifying one or more second bit strings corresponding to all DCT coefficients in the macro block;

transcoding <u>the first bit string to produce a first transcoded bit string indicative of a</u> macro block type for the macro block with motion compensation and with no DCT coefficient;

<u>transcoding the one or more second bit strings to produce one or more second transcoded bit strings; and</u>

~~all DCT coefficients in a macro block concerned in said detection to "0" and transcoding said macro block type to such a type that indicates "performing of motion compensation and having no DCT coefficient"; and~~

outputting said bitstream <u>by substituting the first bit string in the bitstream using the first transcoded bit string and substituting the one or more second bit strings in the bitstream using the one or more second transcoded bit strings</u> ~~having a code quantity thereof reduced by said~~ ·

~~transcoding step~~.

8. (Currently Amended) A bitstream transcoding method comprising the steps of:

analyzing ~~a data structure of~~ a bitstream <u>to identify a first bit string corresponding to a coded macro block type for a macro block, indicating having at least one block with a DCT coefficient, motion compensation applicable, and with quantization</u> ~~to be input to thereby detect whether a macro block type indicates "performing of motion compensation, containing of a block having a DCT coefficient, and being a variation point in a quantization step"~~;

<u>identifying, in the bitstream, one or more second bit strings corresponding to all coded DCT coefficients in the macro block;</u>

transcoding <u>the first bit string to produce a first transcoded bit string indicative of a</u> macro block type for the macro block with motion compensation with no DCT coefficient ~~all DCT coefficients in a macro block concerned in said detection to "0" and transcoding said macro~~

~~block type to such a type that indicates "performing of motion compensation and having no DCT coefficient";~~

transcoding the one or more second bit strings to produce one or more second transcoded bit strings; and

outputting said bitstream by substituting the first bit string in the bitstream using the first transcoded bit string and substituting the one or more second bit strings in the bitstream using the one or more second transcoded bit strings~~having a code quantity thereof reduced by said transcoding step~~.

9. (Currently Amended) A bitstream transcoding method comprising the steps of:

analyzing ~~a data structure of~~ a bitstream to identify a first bit string corresponding to a coded ~~to be input to thereby detect whether a relevant~~ DCT block having ~~contains~~ a DCT coefficient and representing [of] a chrominance signal ~~in a macro block~~;

identifying, in the first bit string, one or more sub bit strings corresponding to all coded DCT coefficients in the coded DCT block;

identifying a second bit string corresponding to a coded block pattern;

transcoding the first bit string based on the one or more sub bit strings to produce a first transcoded bit string with fewer bits;

transcoding the second bit string to produce a second transcoded bit string corresponding to a coded block pattern consistent with the first transcoded bit string ~~all DCT coefficients in said DCT block of said chrominance signal concerned in said detection to "0" and changing a coded block pattern correspondingly~~; and

outputting said bitstream <u>by substituting the first bit string in the bitstream using the first</u> <u>transcoded bit string and substituting the second bit string in the bitstream using the second</u> <u>transcoded bit string</u> ~~having a code quantity thereof reduced by said transcoding step~~.

10. (Currently Amended) A bitstream transcoding method comprising the steps of:

analyzing ~~a data structure of~~ a bitstream to <u>identify a first bit string corresponding to a</u> <u>coded</u> ~~be input to thereby detect whether a relevant~~ <u>chrominance</u> DCT block <u>in a macro block</u> <u>having</u> ~~contains~~ a DCT coefficient ~~of a chrominance signal in a macro block~~;

<u>identifying, in the bitstream, a second bit string corresponding to a coded luminance DCT</u> <u>block in the macro block having a DCT coefficient;</u>

<u>identifying, in the second bit string, a sub bit string corresponding to a first</u> ~~leaving as is~~ ~~only one~~ "non-zero" coefficient <u>in the coded luminance DCT block</u> ~~encountered first~~ in <u>a scan</u> <u>direction</u> ~~scanning in said DCT block containing said DCT coefficient of said luminance signal~~ ~~in a macro block corresponding to said DCT block of said chrominance signal concerned in said~~ ~~detection and~~;

<u>identifying a third bit string corresponding to a coded block pattern for the macro block;</u>

transcoding <u>the first bit string to produce a first transcoded bit string;</u>

transcoding <u>the second bit string based on the sub bit string to produce a second</u> <u>transcoded bit string</u> ~~all the other DCT coefficients to "0";~~

~~transcoding all DCT coefficients in said DCT block of said chrominance signal~~ ~~concerned in said detection to "0" and changing a coded block pattern correspondingly; and~~;

<u>transcoding the third bit string to produce a third transcoded bit string indicative of a</u> <u>coded block pattern consistent with the first transcoded bit string and the second transcoded bit</u> <u>string; and</u>

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outputting said bitstream <u>by substituting the first bit string in the bitstream using the first</u> transcoded bit string, <u>substituting the second bit string in the bitstream using the second</u> transcoded bit string, <u>and substituting the third bit string in the bitstream using the third</u> transcoded bit string ~~having a code quantity thereof reduced by said transcoding step~~.

11. (Currently Amended) A bitstream transcoding method comprising the steps of:

analyzing ~~a data structure of~~ a bitstream <u>to identify a first bit string corresponding to a coded</u> ~~to be input to thereby detect whether a relevant~~ DCT block <u>having</u> ~~contains~~ a DCT coefficient ~~in a macro block~~;

<u>identifying, in the first bit string, a sub bit string corresponding to a first coded</u> ~~leaving as is only one~~ "non-zero" coefficient ~~encountered first~~ <u>in the coded DCT block</u> in <u>a scan direction</u> ~~scanning in said DCT block detected to contain said DCT coefficient and~~;

transcoding <u>the first bit string based on the sub bit string to produce a first transcoded bit string with fewer bits</u> ~~all the other DCT coefficients to "0"~~;

outputting said bitstream <u>by substituting the first bit string in the bitstream using the first</u> transcoded bit string ~~having a code quantity thereof reduced by said transcoding step~~;

<u>identifying a second bit string corresponding to a coded picture in the bitstream;</u>

<u>transcoding the second bit string to produce a second transcoded bit string representing a</u> ~~replacing an individual picture in said bitstream to be input with a~~ dummy picture; and

outputting said bitstream <u>by substituting the second bit string in the bitstream using the</u> second transcoded bit string ~~having a code quantity reduced by said replacing step~~,

wherein <u>said</u> ~~the step of~~ outputting said bitstream <u>by substituting the first bit string</u> ~~having a code quantity reduced by said transcoding step and the step of~~ <u>and said</u> outputting said

bitstream by substituting the second bit string ~~having a code quantity reduced by said~~ replacing ~~step~~ are switched appropriately [in] by configuration.

12. (Currently Amended) A bitstream transcoding method comprising the steps of:

analyzing ~~a data structure of~~ a bitstream ~~to be input to thereby detect whether a relevant~~ to identify a first bit string corresponding to a coded DCT block having ~~contains~~ a DCT coefficient ~~in an inter-macro-block~~ and in an inter predictive coding mode ~~accompanied by predictive coding~~;

identifying, in the first bit string, a sub bit string corresponding to a DC coefficient in the DCT block;

transcoding the first bit string based on the sub bit string to produce a first transcoded bit string with fewer bits; and

~~leaving as is only a DC coefficient in said DCT block detected to contain said DCT coefficient in said inter-macro-block and transcoding all the other AC coefficients to "0";~~

outputting said bitstream by substituting the first bit string using the first transcoded bit string ~~having a code quantity thereof reduced by said transcoding step~~;

identifying a second bit string corresponding to a coded picture in the bitstream;

transcoding the second bit string to produce a second transcoded bit string representing a ~~replacing an individual picture in said bitstream to be input with a~~ dummy picture; and

outputting said bitstream by substituting the second bit string in the bitstream using the second transcoded bit string ~~having a code quantity reduced by said replacing step~~,

wherein said ~~the step of~~ outputting said bitstream by substituting the first bit string ~~having a code quantity reduced by said transcoding step and the step of~~ and said outputting said

bitstream by substituting the second bit string having a code quantity reduced by said replacing step are switched appropriately [in] by configuration.

13. (Currently Amended) A bitstream transcoding method comprising the steps of:

analyzing a data structure of a bitstream to be input to thereby detect whether a relevant to identify a first bit string corresponding to a coded DCT block having contains a DCT coefficient in an intra-macro and in an intra non-predictive coding mode block not accompanied by predictive coding;

identifying, in the first bit string, a sub bit string corresponding to leaving as is only a DC coefficient in said DCT block; detected to contain said DCT coefficient in said intra-macro block and

transcoding all the other AC coefficients to "0" the first bit string based on the sub bit string to produce a first transcoded bit string with fewer bits;

outputting said bitstream by substituting the first bit string in the bitstream using the first transcoded bit string having a code quality thereof reduced by said transcoding step;

identifying a second bit string corresponding to a coded picture in the bitstream;

transcoding the second bit string to produce a second transcoded bit string representing a replacing an individual picture in said bitstream to be input with a dummy picture; and

outputting said bitstream by substituting the second bit string in the bitstream using the second transcoded bit string having a code quantity reduced by said replacing step,

wherein said the step of outputting said bitstream by substituting the first bit string having a code quantity reduced by said transcoding step and the step of and said outputting said bitstream by substituting the second bit string having a code quantity reduced by said replacing step are switched appropriately [in] by configuration.

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14. (Currently Amended) A bitstream transcoding method comprising the ~~A~~ steps of:

analyzing ~~a data structure of~~ a bitstream to identify a first bit string corresponding to a coded ~~to be input to thereby detect whether a relevant~~ DCT block having ~~contains~~ a DCT coefficient ~~in a macro block~~;

identifying, in the bit string, a sub bit string corresponding to first N coefficients in the coded DCT block in a scan direction ~~;leaving as are only the first through N'th coefficients (N: natural number) in said DCT block detected to contain said DCT coefficient and~~

transcoding the first bit string based on the sub bit string to produce a first transcoded bit string with fewer bits ~~all the other DCT coefficients to "0"~~;

outputting said bitstream by substituting the first bit string in the bitstream using the first transcoded bit string ~~having a code quantity thereof reduced by said transcoding step~~;

identifying a second bit string corresponding to a coded picture in the bitstream;

transcoding the second bit string to produce a second transcoded bit string representing a ~~replacing an individual picture in said bitstream to be input with a~~ dummy picture; and

outputting said bitstream by substituting the second bit string in the bitstream using the second transcoded bit string ~~having a code quantity reduced by said replacing step~~,

wherein said ~~the step of~~ outputting said bitstream by substituting the first bit string ~~having a code quantity reduced by said transcoding step and the step of~~ and said outputting said bitstream by substituting the second bit string ~~having a code quantity reduced by said replacing step~~ are switched appropriately [in] by configuration.

15. (Currently Amended) A bitstream transcoding method comprising the steps of:

analyzing ~~a data structure of~~ a bitstream to identify a first bit string corresponding to a coded macro block type for a macro block, indicating having at least one block with a DCT

coefficient and motion compensation applicable ~~to be input to thereby detect whether a macro block type indicates "performing of motion compensation and containing of a block having a DCT coefficient";~~

identifying one or more second bit strings corresponding to all DCT coefficients in the macro block;

transcoding the first bit string to produce a first transcoded bit string indicative of a macro block type for the macro block with motion compensation and with no DCT coefficient;

~~all DCT coefficients in a macro block concerned in said detection to "0" and transcoding said macro block type to such a type that indicates "performing of motion compensation and having no DCT coefficient";~~

transcoding the one or more second bit strings to produce one or more second transcoded bit strings;

outputting said bitstream by substituting the first bit string in the bitstream using the first transcoded bit string and substituting the one or more second bit strings using the one or more second transcoded bit strings ~~having a code quantity thereof reduced by said transcoding step~~;

identifying a second bit string corresponding to a coded picture in the bitstream;

transcoding the second bit string to produce a second transcoded bit string representing a ~~replacing an individual picture in said bitstream to be input with a~~ dummy picture; and

outputting said bitstream by substituting the second bit string in the bitstream using the second transcoded bit string ~~having a code quantity reduced by said replacing step~~,

wherein said ~~the step of~~ outputting said bitstream by substituting the first bit string ~~having a code quantity reduced by said transcoding step and the step of~~ and said outputting said

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bitstream by substituting the second bit string ~~having a code quantity reduced by said replacing~~ ~~step~~ are switched appropriately [in] by configuration.

16. (Currently Amended) A bitstream transcoding method comprising the steps of:

analyzing ~~a data structure of~~ a bitstream to identify a first bit string corresponding to a coded macro block type for a macro block, indicating having at least one block with a DCT coefficient, motion compensation applicable, and with quantization ~~to be input to thereby detect~~ ~~whether a macro block type indicates "performing of motion compensation, containing of a~~ ~~block having a DCT coefficient, and being a variation point in a quantization step"~~;

identifying, in the bitstream, one or more second bit strings corresponding to all coded DCT coefficients in the macro block;

transcoding the first bit string to produce a first transcoded bit string indicative of a macro block type for the macro block with motion compensation with no DCT coefficient ~~all~~ ~~DCT coefficients in a macro block concerned in said detection to "0" and transcoding said macro~~ ~~block type to such a type that indicates "performing of motion compensation and having no DCT~~ ~~coefficient"~~;

transcoding the one or more second bit strings to produce one or more second transcoded bit strings;

outputting said bitstream by substituting the first bit string in the bitstream using the first transcoded bit string and substituting the one or more second bit strings in the bitstream using the one or more second transcoded bit strings~~having a code quantity thereof reduced by said~~ ~~transcoding step~~;

identifying a second bit string corresponding to a coded picture in the bitstream;

transcoding the second bit string to produce a second transcoded bit string representing a

~~replacing an individual picture in said bitstream to be input with a~~ dummy picture; and

outputting said bitstream by substituting the second bit string in the bitstream using the

second transcoded bit string ~~having a code quantity reduced by said replacing step~~,

wherein said ~~the step of~~ outputting said bitstream by substituting the first bit string ~~having~~

~~a code quantity reduced by said transcoding step and the step of~~ and said outputting said

bitstream by substituting the second bit string ~~having a code quantity reduced by said~~ replacing

~~step~~ are switched appropriately [in] by configuration.

17. (Currently Amended) A bitstream transcoding method comprising the steps of:

analyzing ~~a data structure of~~ a bitstream to identify a first bit string corresponding to a

coded ~~to be input to thereby detect whether a relevant~~ DCT block having ~~contains~~ a DCT

coefficient and representing [of] a chrominance signal ~~in a macro block~~;

identifying, in the first bit string, one or more sub bit strings corresponding to all coded

DCT coefficients in the coded DCT block;

identifying a second bit string corresponding to a coded block pattern;

transcoding the first bit string based on the one or more sub bit strings to produce a first

transcoded bit string with fewer bits;

transcoding the second bit string to produce a second transcoded bit string corresponding

to a revised coded block pattern consistent with the first transcoded bit string ~~all DCT~~

~~coefficients in said DCT block of said chrominance signal concerned in said detection to "0" and~~

~~changing a coded block pattern correspondingly~~;

outputting said bitstream <u>by substituting the first bit string in the bitstream using the first transcoded bit string and substituting the second bit string in the bitstream using the second transcoded bit string</u> ~~having a code quantity thereof reduced by said transcoding step~~;

identifying a second bit string corresponding to a coded picture in the bitstream;

transcoding the second bit string to produce a second transcoded bit string representing a ~~replacing an individual picture in said bitstream to be input with a~~ dummy picture; and

outputting said bitstream <u>by substituting the second bit string in the bitstream using the second transcoded bit string</u> ~~having a code quantity reduced by said replacing step~~,

wherein <u>said</u> ~~the step of~~ outputting said bitstream <u>by substituting the first bit string</u> ~~having a code quantity reduced by said transcoding step and the step of~~ <u>and said</u> outputting said bitstream <u>by substituting the second bit string</u> ~~having a code quantity reduced by said replacing step~~ are switched appropriately [in] <u>by</u> configuration.

18. (Currently Amended) A bitstream transcoding method comprising the steps of:

analyzing ~~a data structure of~~ a bitstream to <u>identify a first bit string corresponding to a coded</u> ~~be input to thereby detect whether a relevant~~ <u>chrominance</u> DCT block <u>in a macro block having</u> ~~contains~~ a DCT coefficient ~~of a chrominance signal in a macro block~~;

<u>identifying, in the bitstream, a second bit string corresponding to a coded luminance DCT block in the macro block having a DCT coefficient;</u>

<u>identifying, in the second bit string, a sub bit string corresponding to a first</u> ~~leaving as is only one~~ "non-zero" coefficient <u>in the luminance DCT block</u> ~~encountered first~~ in <u>a scan direction</u> ~~scanning in said DCT block containing said DCT coefficient of said luminance signal in a macro block corresponding to said DCT block of said chrominance signal concerned in said detection~~ <u>and</u>~~and~~;

identifying a third bit string corresponding to a coded block pattern for the macro block;

transcoding the first bit string to produce a first transcoded bit string;

transcoding the second bit string based on the sub bit string to produce a second transcoded bit string ~~all the other DCT coefficients to "0";~~

~~transcoding all DCT coefficients in said DCT block of said chrominance signal concerned in said detection to "0" and changing a coded block pattern correspondingly; and~~;

transcoding the third bit string to produce a third transcoded bit string indicative of a coded block pattern of the macro bloc consistent with the first transcoded bit string and the second transcoded bit string;

outputting said bitstream by substituting the first bit string in the bitstream using the first transcoded bit string, substituting the second bit string in the bitstream using the second transcoded bit string, and substituting the third bit string in the bitstream using the third transcoded bit string ~~having a code quantity thereof reduced by said transcoding step~~;

identifying a second bit string corresponding to a coded picture in the bitstream;

transcoding the second bit string to produce a second transcoded bit string representing a ~~replacing an individual picture in said bitstream to be input with a~~ dummy picture; and

outputting said bitstream by substituting the second bit string in the bitstream using the second transcoded bit string ~~having a code quantity reduced by said replacing step~~,

wherein said ~~the step of~~ outputting said bitstream by substituting the first bit string ~~having a code quantity reduced by said transcoding step and the step of~~ and said outputting said bitstream by substituting the second bit string ~~having a code quantity reduced by said replacing step~~ are switched appropriately [in] by configuration.

19. (Currently Amended) The bitstream transcoding method according to claim 11, wherein, in said step of said switching, the step of outputting said bitstream having a code quantity reduced by said transcoding step and the step of outputting said bitstream having a code quantity reduced by said replacing step are switched occurs when an input is a picture in a non-predictive coding mode each time a picture not employing predictive coding is input.

20. (Currently Amended) The bitstream transcoding method according to claim 11, wherein, in said step of said switching, the step of outputting said bitstream having a code quantity reduced by said transcoding step and the step of outputting said bitstream having a code quantity reduced by said replacing step are switched occurs when an input is a GOP header each time a GOP header is input.

21. (Currently Amended) The bitstream transcoding method according to claim 11, wherein, in said step of said switching, the step of outputting said bitstream having a code quantity reduced by said transcoding step and the step of outputting said bitstream having a code quantity reduced by said replacing step are switched occurs when an input is a picture in a non-predictive coding mode and / or the input is a GOP header each time a picture not employing predictive coding is input and each time a GOP header is input.

22. (Currently Amended) A bitstream transcoding method comprising the steps of:

configuring

level 1 transcoding to be the setting at level 1 such a case that performs the transcoding method according to claim 1 to be applied to [on] a picture in a bidirectional prediction mode employing bilateral prediction;,

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level 2 transcoding to be ~~setting at level 2 such a case that performs~~ a transcoding method of replacing a picture <u>in a bidirectional prediction mode</u> ~~employing bilateral prediction~~ with a dummy picture[;]<u>,</u>

level 3 transcoding to be ~~setting at level 3 such a case that performs~~ the transcoding method according to claim 1 <u>to be applied to</u> [on] a picture <u>in a forward prediction mode</u> ~~employing forward prediction;,~~

level 4 transcoding to be ~~setting at level 4 such a case that performs~~ a transcoding method of replacing a picture <u>in a forward prediction mode</u> ~~employing forward prediction~~ with a dummy picture[;]<u>,</u>

level 5 transcoding to be ~~setting at level 5 such a case that performs~~ a transcoding method of replacing a picture <u>in a non-predictive coding mode</u> ~~not employing predictive coding~~ with a dummy picture at a predetermined rate;

detecting an instruction for switching <u>among the five levels of transcoding as defined by said configuring</u> ~~said plurality of levels 1 through 5~~; and

switching said levels <u>of transcoding</u> ~~each time said switching~~ <u>according to the</u> instruction ~~is received~~.

23. (Currently Amended) A bitstream transcoding method comprising the steps of:

<u>configuring</u>

level 1 transcoding to be the ~~setting at level 1 such a case that performs the~~ transcoding method according to claim 5 <u>to be applied to</u> [on] a picture <u>in a bidirectional prediction mode</u> ~~employing bilateral prediction;,~~

level 2 transcoding to be ~~setting at level 2 such a case that performs~~ a transcoding method of replacing a picture in a bidirectional prediction mode ~~employing bilateral prediction~~ with a dummy picture[;]_

level 3 transcoding to be ~~setting at level 3 such a case that performs~~ the transcoding method according to claim 5 to be applied to [on] a picture in a forward prediction mode ~~employing forward prediction;~~_

level 4 transcoding to be ~~setting at level 4 such a case that performs~~ a transcoding method of replacing a picture in a forward prediction mode ~~employing forward prediction~~ with a dummy picture[;]_

level 5 transcoding to be ~~setting at level 5 such a case that performs~~ a transcoding method of replacing a picture in a non-predictive coding mode ~~not employing predictive coding~~ with a dummy picture at a predetermined rate;

detecting an instruction for switching among the five levels of transcoding as defined by said configuring ~~said plurality of levels 1 through 5~~; and

switching said levels of transcoding ~~each time said switching~~ according to the instruction ~~is received~~.

24. (Currently Amended) A bitstream transcoding method comprising the steps of:

configuring

level 1 transcoding to be the ~~setting at level 1 such a case that performs the~~ transcoding method according to claim 7 to be applied to [on] a picture in a bidirectional prediction mode ~~employing bilateral prediction;~~_

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level 2 transcoding to be ~~setting at level 2 such a case that performs~~ a transcoding method of replacing a picture in a bidirectional prediction mode ~~employing bilateral prediction~~ with a dummy picture[;]_

level 3 transcoding to be ~~setting at level 3 such a case that performs~~ the transcoding method according to claim 7 to be applied to [on] a picture in a forward prediction mode ~~employing forward prediction;~~_

level 4 transcoding to be ~~setting at level 4 such a case that performs~~ a transcoding method of replacing a picture in a forward prediction mode ~~employing forward prediction~~ with a dummy picture[;]_

level 5 transcoding to be ~~setting at level 5 such a case that performs~~ a transcoding method of replacing a picture in a non-predictive coding mode ~~not employing predictive coding~~ with a dummy picture at a predetermined rate;

detecting an instruction for switching among the five levels of transcoding as defined by said configuring ~~said plurality of levels 1 through 5~~; and

switching said levels of transcoding ~~each time said switching~~ according to the instruction ~~is received~~.

25. (Currently Amended) A bitstream transcoding method comprising the steps of:

configuring

level 1 transcoding to be the ~~setting at level 1 such a case that performs~~ the transcoding method according to claim 8 to be applied to [on] a picture in a bidirectional prediction mode ~~employing bilateral prediction;~~_

level 2 transcoding to be ~~setting at level 2 such a case that performs~~ a transcoding method of replacing a picture in a bidirectional prediction mode ~~employing bilateral prediction~~ with a dummy picture[;],

level 3 transcoding to be ~~setting at level 3 such a case that performs~~ the transcoding method according to claim 8 to be applied to [on] a picture in a forward prediction mode ~~employing forward prediction;~~,

level 4 transcoding to be ~~setting at level 4 such a case that performs~~ a transcoding method of replacing a picture in a forward prediction mode ~~employing forward prediction~~ with a dummy picture[;],

level 5 transcoding to be ~~setting at level 5 such a case that performs~~ a transcoding method of replacing a picture in a non-predictive coding mode ~~not employing predictive coding~~ with a dummy picture at a predetermined rate;

detecting an instruction for switching among the five levels of transcoding as defined by said configuring ~~said plurality of levels 1 through 5~~; and

switching said levels of transcoding ~~each time said switching~~ according to the instruction ~~is received~~.

26. (Currently Amended) A bitstream transcoding method comprising the steps of:

configuring

level 1 transcoding to be the ~~setting at level 1 such a case that performs the~~ transcoding method according to claim 9 to be applied to [on] a picture in a bidirectional prediction mode ~~employing bilateral prediction;~~,

level 2 transcoding to be ~~setting at level 2 such a case that performs~~ a transcoding method of replacing a picture in a bidirectional prediction mode ~~employing bilateral prediction~~ with a dummy picture[;],

level 3 transcoding to be ~~setting at level 3 such a case that performs~~ the transcoding method according to claim 9 to be applied to [on] a picture in a forward prediction mode ~~employing forward prediction;~~,

level 4 transcoding to be ~~setting at level 4 such a case that performs~~ a transcoding method of replacing a picture in a forward prediction mode ~~employing forward prediction~~ with a dummy picture[;],

level 5 transcoding to be ~~setting at level 5 such a case that performs~~ a transcoding method of replacing a picture in a non-predictive coding mode ~~not employing predictive coding~~ with a dummy picture at a predetermined rate;

detecting an instruction for switching among the five levels of transcoding as defined by said configuring ~~said plurality of levels 1 through 5~~; and

switching said levels of transcoding ~~each time said switching~~ according to the instruction ~~is received~~.

27. (Currently Amended) A bitstream transcoding method comprising the steps of:

configuring

level 1 transcoding to be the ~~setting at level 1 such a case that performs the~~ transcoding method according to claim 10 to be applied to [on] a picture in a bidirectional prediction mode ~~employing bilateral prediction;~~,

level 2 transcoding to be ~~setting at level 2 such a case that performs~~ a transcoding method of replacing a picture in a bidirectional prediction mode ~~employing bilateral prediction~~ with a dummy picture[;],

level 3 transcoding to be ~~setting at level 3 such a case that performs~~ the transcoding method according to claim 10 to be applied to [on] a picture in a forward prediction mode ~~employing forward prediction;,~~

level 4 transcoding to be ~~setting at level 4 such a case that performs~~ a transcoding method of replacing a picture in a forward prediction mode ~~employing forward prediction~~ with a dummy picture[;],

level 5 transcoding to be ~~setting at level 5 such a case that performs~~ a transcoding method of replacing a picture in a non-predictive coding mode ~~not employing predictive coding~~ with a dummy picture at a predetermined rate;

detecting an instruction for switching among the five levels of transcoding as defined by said configuring ~~said plurality of levels 1 through 5~~; and

switching said levels of transcoding ~~each time said switching~~ according to the instruction ~~is received~~.

28. (Currently Amended) The bitstream transcoding method according to claim 22, wherein said step of switching said levels is performed when an input is a picture in a predictive coding mode ~~each time a picture not employing predictive coding is input~~.

29. (Currently Amended) The bitstream transcoding method according to claim 22, wherein said step of switching said levels is performed when an input is ~~each time~~ a GOP header ~~is input~~.

30. (Currently Amended) The bitstream transcoding method according to claim 22, wherein said step of switching said levels is performed at a ~~each~~ predetermined time interval.

31. (Currently Amended) The bitstream transcoding method according to claim 22, wherein at least [any] one of said ~~plurality of~~ levels of transcoding ~~is left as is to thereby remove any desired one or an any desired plurality of said levels remaining~~ can be removed.

32. (Currently Amended) The bitstream transcoding method according to claim 1, wherein ~~a subject~~ the bitstream contains an encoded image signal coded according to [the] an MPEG standard.

33. (Currently Amended) A bitstream transcoding apparatus comprising:

code detecting means for analyzing ~~a data structure of~~ an input bitstream; and

DCT coefficients reducing means for producing, based on an analyzing result from said code detecting means, a transcoded bitstream, wherein

the transcoded bitstream is generated by substituting a bit string in the bitstream using a transcoded bit string having fewer bits,

the bit string identified from the input bitstream corresponds to a coded DCT block having a DCT coefficient,

the transcoded bit string is generated based on a sub bit string identified from the bit string and corresponding to at least one coded ~~leaving as is at least one~~ "non-zero" DCT coefficient of the ~~DCT coefficients in a~~ DCT block of said input bitstream ~~and transcoding all the other DCT coefficients to "0" based on a data structure analyzing result by said code detecting means~~.

34. (Currently Amended) A bitstream transcoding apparatus comprising:

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code detecting means for analyzing ~~a data structure of~~ an input bitstream;

~~DCT coefficients reducing means for leaving as is at least one "non-zero" DCT coefficient of DCT coefficients in a DCT block of said input bitstream and transcoding all the other DCT coefficients to "0" based on a data structure analyzing result by said code detecting means; and~~

DCT coefficient reducing means for producing a transcoded bitstream of the input bitstream; and

macro block type transcoding ~~method~~ means for transcoding, based on an analyzing result from the code detecting means, a first bit string corresponding to a macro block type of a coded macro block in said input bitstream to produce a first transcoded bit string indicative of a macro block type consistent with the transcoded bitstream, wherein ~~to such a macro block type that corresponds to a processing result by said DCT coefficients reducing means based on said data structure analyzing result by said code detecting means~~;

the trancoded bitstream is generated by substituting the first bit string in the bitstream using the first transcoded bit string and substituting a second bit string using a second transcoded bit string,

the second bit string identified from the input bitstream corresponds to a coded DCT block having a DCT coefficient,

the second transcoded bit string is generated based on a sub bit string identified from the second bit string and corresponding to at least one coded "non-zero" DCT coefficient of the DCT block of said input bitstream.

35. (Currently Amended) A bitstream transcoding apparatus comprising:

code detecting means for analyzing ~~a data structure of~~ an input bitstream;

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~~DCT coefficients reducing means for leaving as is at least one "non-zero" DCT coefficient of DCT coefficients in a DCT block of said input bitstream and transcoding all the other DCT coefficients to "0" based on a data structure analyzing result by said code detecting means; and~~

DCT coefficient reducing means for producing, based on an analyzing result from said code detecting means, a transcoded bitstream of the input bitstream; and

coded block pattern transcoding means ~~method~~ for transcoding, based on an analyzing result from the code detecting means, a first bit string corresponding to a coded block pattern of a coded macro block in said input bitstream to produce a first transcoded bit string indicative of a coded block pattern consistent with the transcoded bitstream, wherein ~~such a coded block pattern that corresponds to a processing result by said DCT coefficients reducing means based on said data structure analyzing result by said code detecting means.~~

the trancoded bitstream is generated by substituting the first bit string in the bitstream using the first transcoded bit string and substituting a second bit string using a second transcoded bit string,

the second bit string identified from the input bitstream corresponds to a coded DCT block having a DCT coefficient,

the second transcoded bit string is generated based on a sub bit string identified from the second bit string and corresponding to at least one coded "non-zero" DCT coefficient of the DCT block of said input bitstream.

36. (Currently Amended) A computer-readable recording medium for use in bitstream transcode recording a program for executing:

a procedure for analyzing ~~a data structure of~~ an input bitstream; and

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a procedure for ~~leaving as is at least one "non-zero" DCT coefficient of DCT coefficients~~ ~~in a DCT block of said input bitstream and transcoding all the other DCT coefficients to "0"~~ ~~based on said data structure analyzing result by said data structure analyzing procedure;~~ producing, based on an analyzing result from said procedure of analyzing, a transcoded bitstream of the input bitstream, wherein

the transcoded bitstream is generated by substituting a bit string in the bitstream using a transcoded bit string,

the bit string identified from the input bitstream corresponds to a coded DCT block having a DCT coefficient,

the transcoded bit string is generated based on a sub bit string, identified from the bit string and corresponding to at least one coded "non-zero" DCT coefficient of the DCT block of said input bitstream.

37. (Currently Amended) A computer-readable recording medium for use in bitstream transcode recording a program for executing:

a procedure for analyzing a data structure of an input bitstream;

~~a procedure for leaving as is at least one "non-zero" DCT coefficient of DCT coefficients~~ ~~in a DCT block of said input bitstream and transcoding all the other DCT coefficients to "0"~~ ~~based on said data structure analyzing result by said data structure analyzing procedure; and~~

a procedure for producing, based on a result from said procedure of analyzing, a transcoded bitstream of the input bitstream; and

a procedure for transcoding a first bit string, corresponding to a coded [a] macro block type of a macro block in [of] said input bitstream, to produce a first transcoded bit string

indicative of a coded macro block type consistent with the transcoded bitstream, wherein ~~to such~~

~~a macro block type that corresponds to a processing result by said DCT coefficient transcoding~~

~~procedure based on said data structure analyzing result.~~

the trancoded bitstream is generated by substituting the first bit string in the bitstream

using the first transcoded bit string and substituting a second bit string using a second transcoded

bit string,

the second bit string identified from the input bitstream corresponds to a coded DCT

block having a DCT coefficient,

the second transcoded bit string is generated based on a sub bit string identified from the

second bit string and corresponding to at least one coded "non-zero" DCT coefficient of the DCT

block of said input bitstream.

38. (Currently Amended) A computer-readable recording medium for use in bitstream

transcode recording a program for executing:

a procedure for analyzing ~~a data structure of~~ an input bitstream;

~~a procedure for leaving as is at least one "non-zero" DCT coefficient of DCT coefficients~~

~~in a DCT block of said input bitstream and transcoding all the other DCT coefficients to "0"~~

~~based on said data structure analyzing result by said data structure analyzing procedure; and~~

a procedure for producing a transcoded bitstream of the input bitstream; and

a procedure for transcoding, based on a result from said procedure of analyzing, a first bit

string corresponding to a coded block pattern of a coded macro block in [of] said input bitstream

to produce a first transcoded bit string indicative of a coded block pattern consistent with the

transcoded bitstream, wherein ~~such a coded block pattern that corresponds to a processing result~~

~~by said DCT coefficient transcoding procedure based on said data structure analyzing result.~~

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the trancoded bitstream is generated by substituting the first bit string in the bitstream using the first transcoded bit string and substituting a second bit string using a second transcoded bit string,

the second bit string identified from the input bitstream corresponds to a coded DCT block having a DCT coefficient,

the second transcoded bit string is generated based on a sub bit string identified from the second bit string and corresponding to at least one coded "non-zero" DCT coefficient of the DCT block of said input bitstream.

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